

Fig. 1

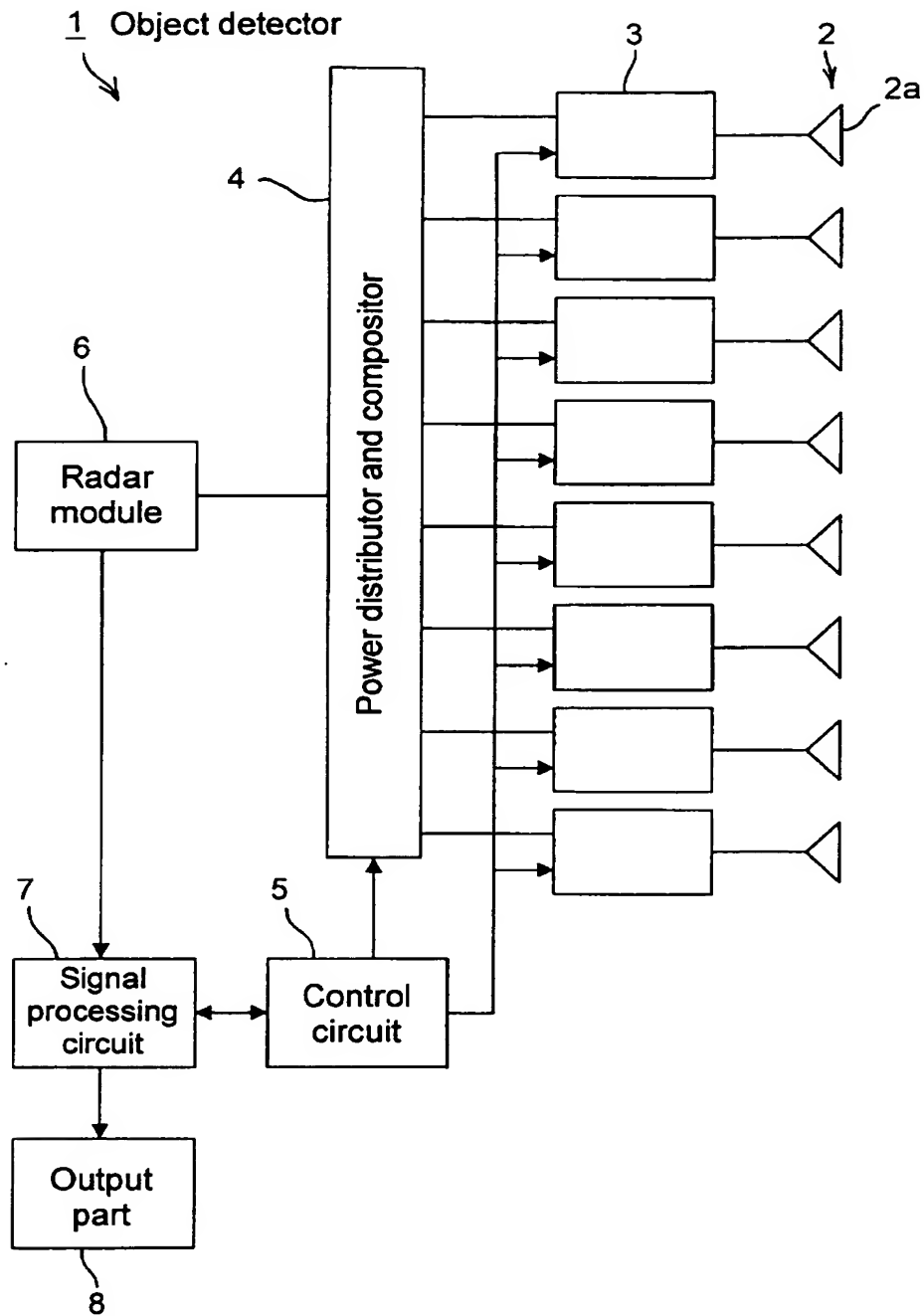


Fig. 2

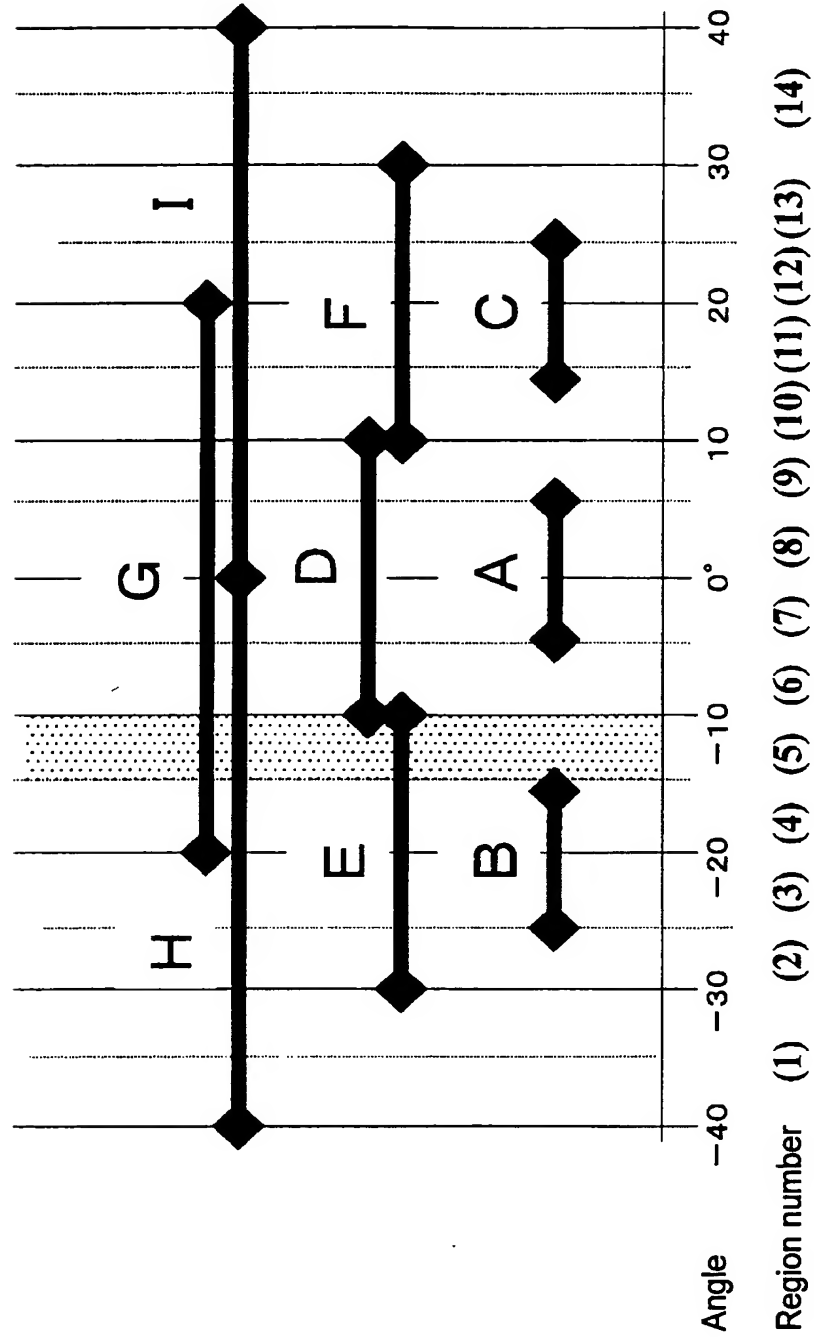


Fig. 3

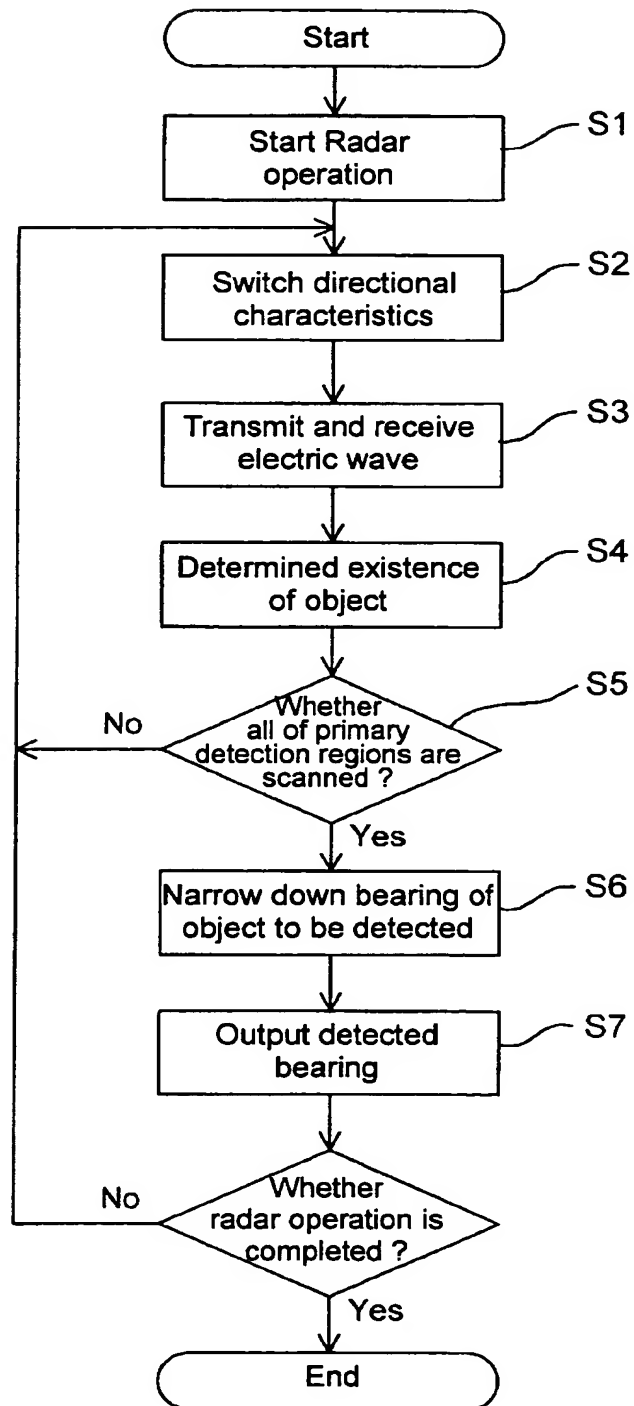


Fig. 4A

| Secondary detection region | Logical operation expressions |
|-------------------------------|--|
| (1) | $(V_h) \& \overline{(V_a V_b V_c V_d V_e V_f V_g V_i)}$ |
| (2) | $(V_e \& V_h) \& \overline{(V_a V_b V_c V_d V_f V_g V_i)}$ |
| (3) | $(V_b \& V_e \& V_h) \& \overline{(V_a V_c V_d V_f V_g V_i)}$ |
| (4) | $(V_b \& V_e \& V_g \& V_h) \& \overline{(V_a V_c V_d V_f V_i)}$ |
| (5) | $(V_e \& V_g \& V_h) \& \overline{(V_a V_b V_c V_d V_f V_i)}$ |
| (6) | $(V_d \& V_g \& V_h) \& \overline{(V_a V_b V_c V_e V_f V_i)}$ |
| (7) | $(V_a \& V_d \& V_g \& V_h) \& \overline{(V_b V_c V_e V_f V_i)}$ |
| (8) | $(V_a \& V_d \& V_g \& V_i) \& \overline{(V_b V_c V_e V_f V_h)}$ |
| (9) | $(V_d \& V_g \& V_i) \& \overline{(V_a V_b V_c V_e V_f V_h)}$ |
| (10) | $(V_f \& V_g \& V_i) \& \overline{(V_a V_b V_c V_d V_e V_h)}$ |
| (11) | $(V_c \& V_f \& V_g \& V_i) \& \overline{(V_a V_b V_d V_e V_h)}$ |
| (12) | $(V_c \& V_f \& V_i) \& \overline{(V_a V_b V_d V_e V_g V_h)}$ |
| (13) | $(V_f \& V_i) \& \overline{(V_a V_b V_c V_d V_e V_g V_h)}$ |
| (14) | $(V_i) \& \overline{(V_a V_b V_c V_d V_e V_f V_g V_h)}$ |

Fig. 4B

| Secondary detection region | Logical operation expressions |
|-------------------------------|------------------------------------|
| (1) | $(V_h) \& \overline{(V_e V_g)}$ |
| (2) | $(V_e) \& \overline{(V_b V_g)}$ |
| (3) | $(V_b) \& \overline{(V_g)}$ |
| (4) | $(V_b \& V_g)$ |
| (5) | $(V_e \& V_g) \& \overline{(V_b)}$ |
| (6) | $(V_d) \& \overline{(V_a V_i)}$ |
| (7) | $(V_a) \& \overline{(V_i)}$ |
| (8) | $(V_a) \& \overline{(V_h)}$ |
| (9) | $(V_d) \& \overline{(V_a V_h)}$ |
| (10) | $(V_f \& V_g) \& \overline{(V_c)}$ |
| (11) | $(V_c \& V_g)$ |
| (12) | $(V_c) \& \overline{(V_g)}$ |
| (13) | $(V_f) \& \overline{(V_c V_g)}$ |
| (14) | $(V_i) \& \overline{(V_f V_g)}$ |

Fig. 5

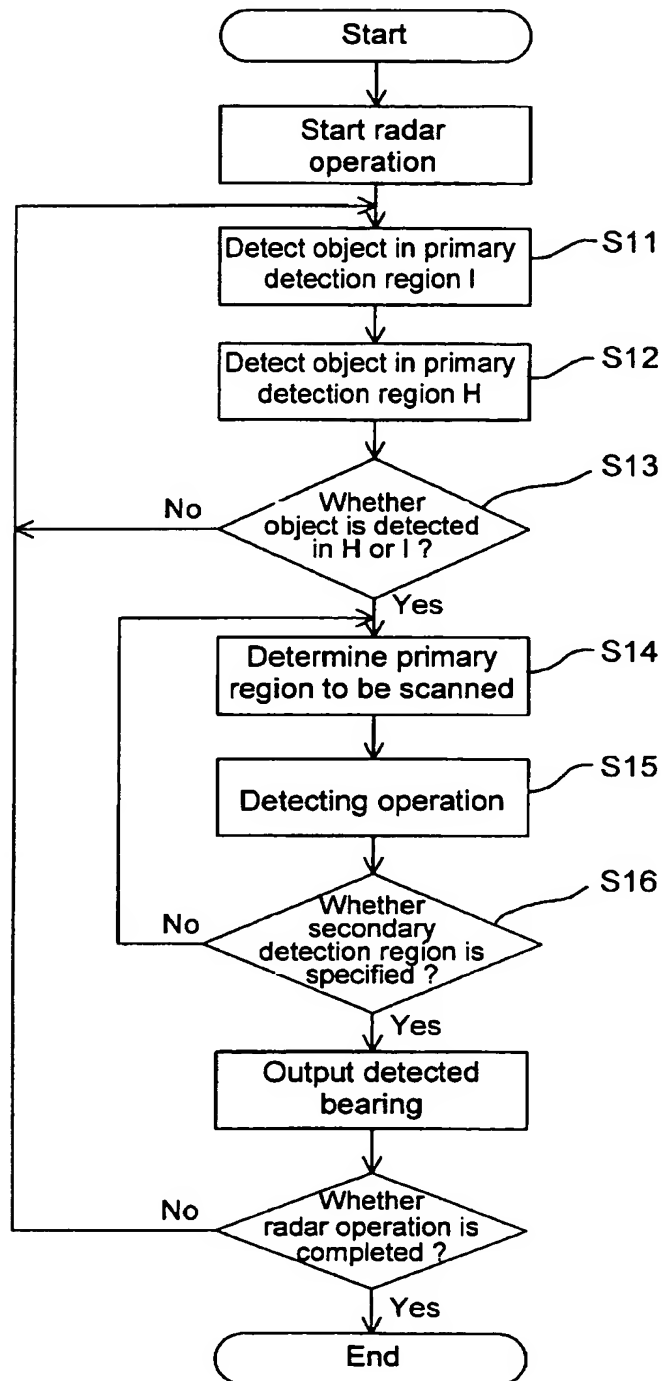


Fig. 6

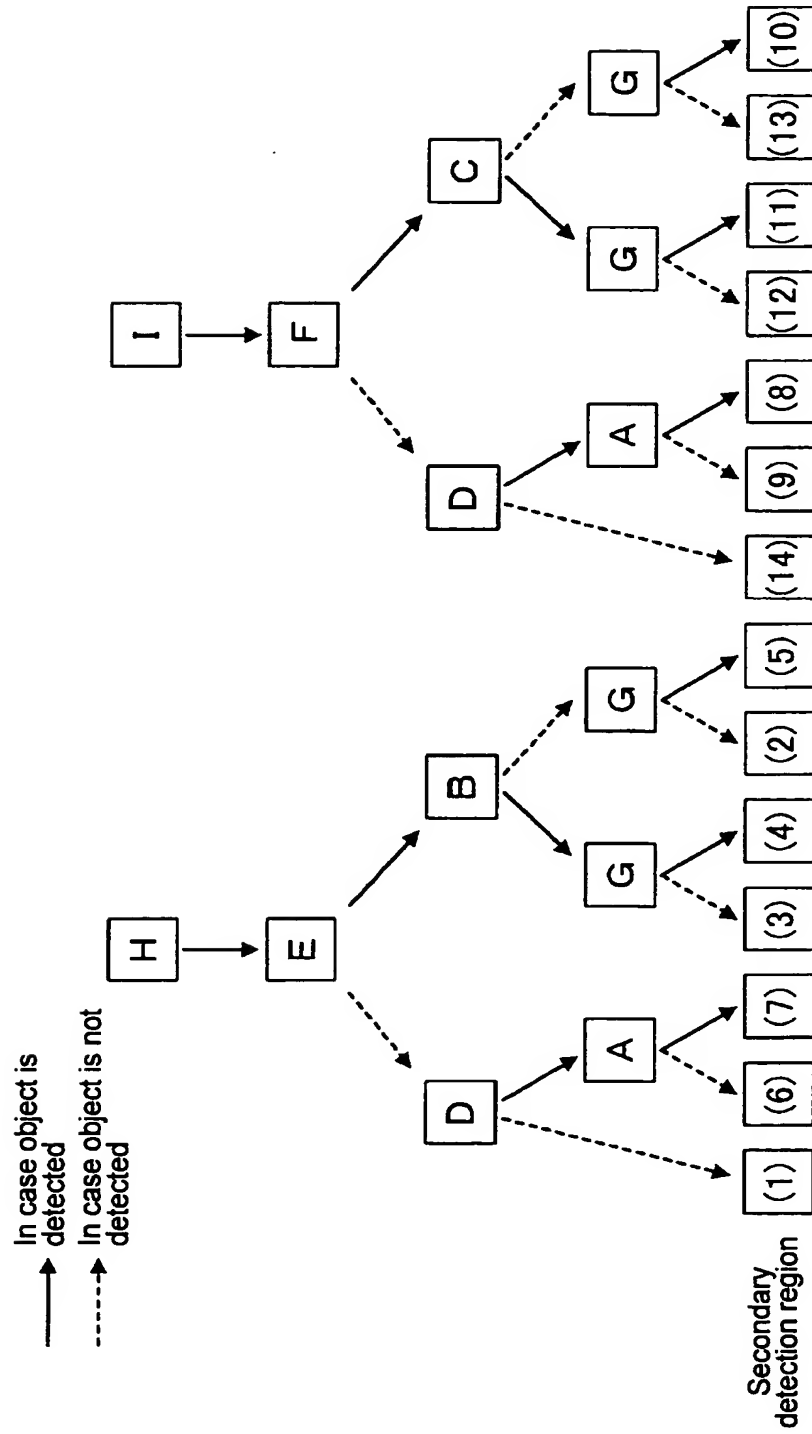


Fig. 7

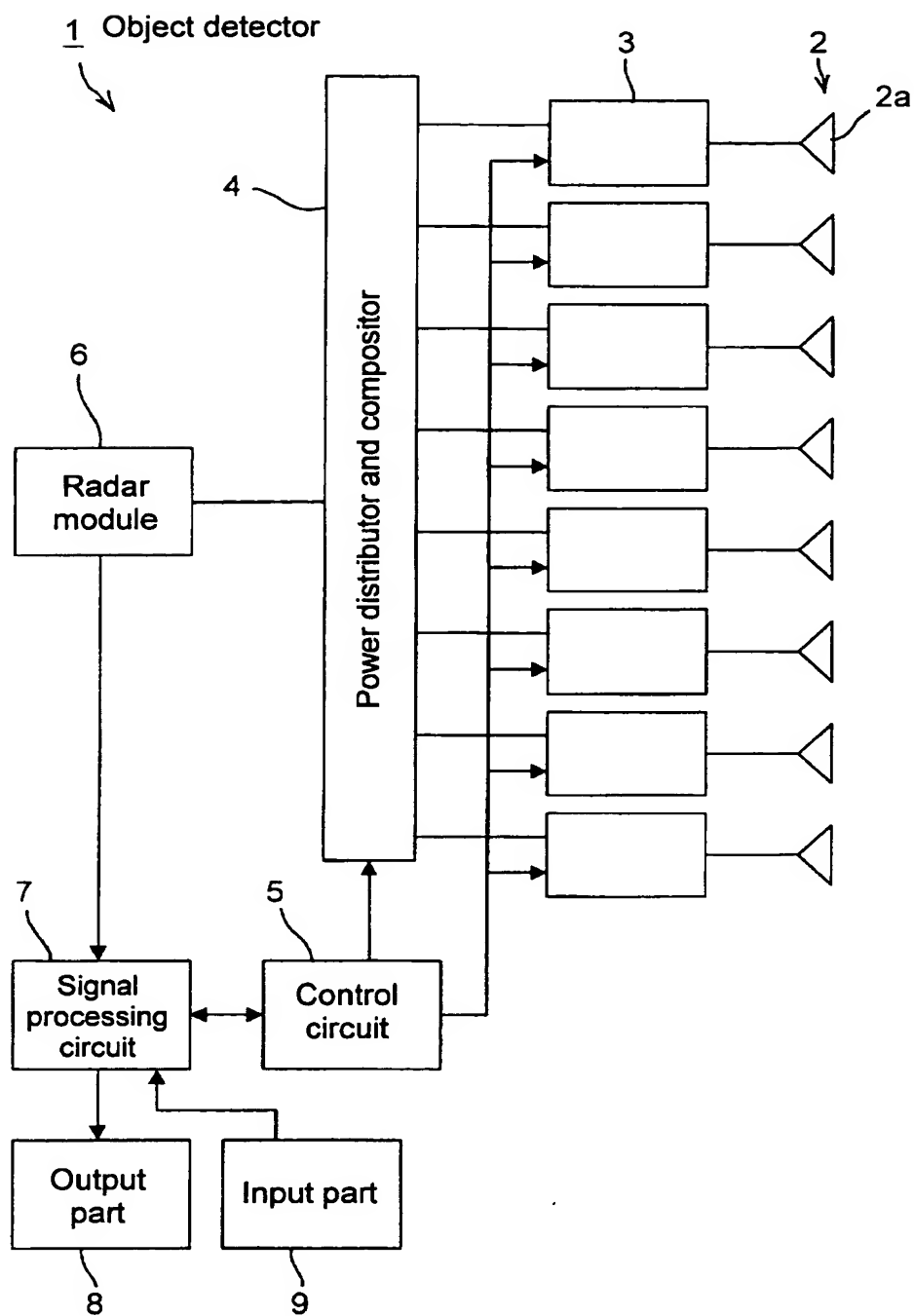


Fig. 8

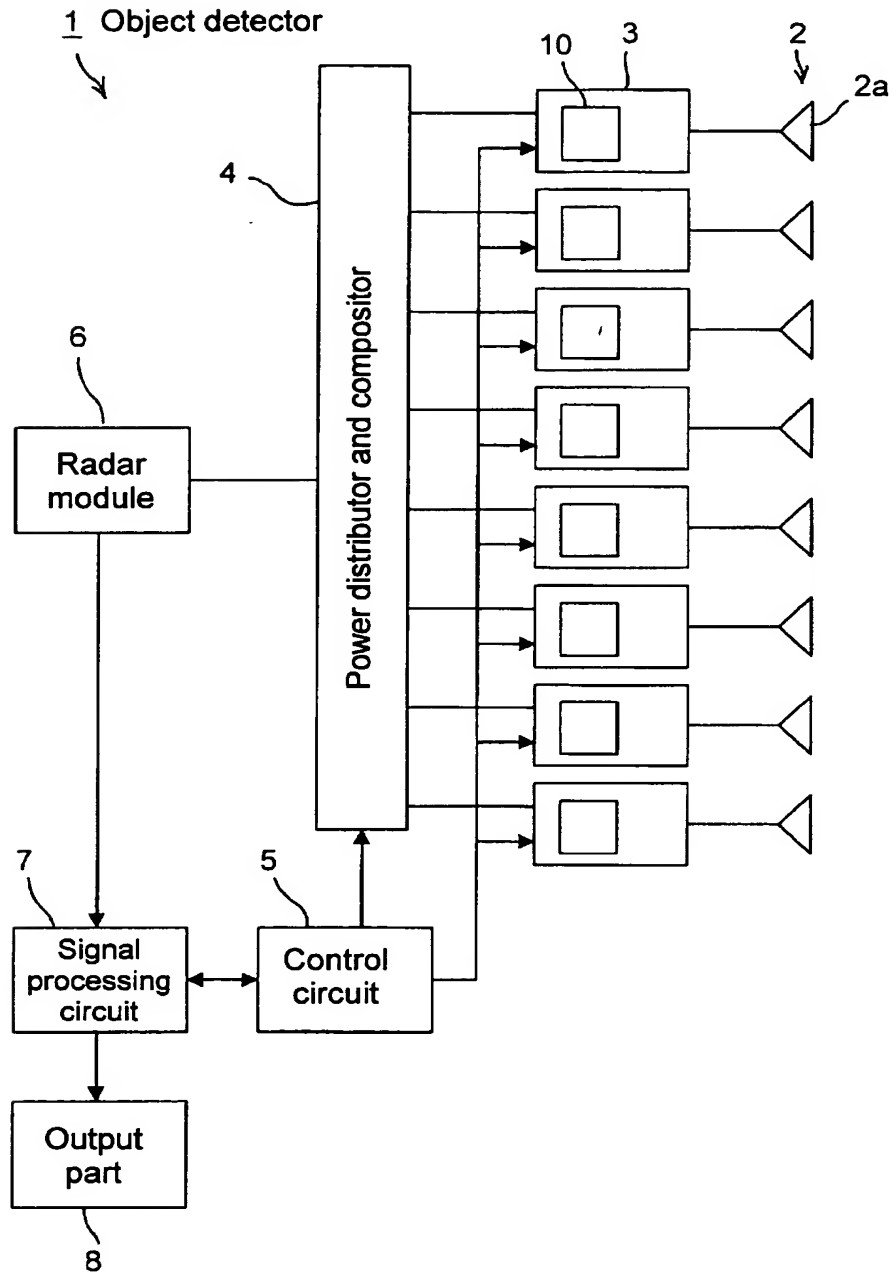


Fig. 9

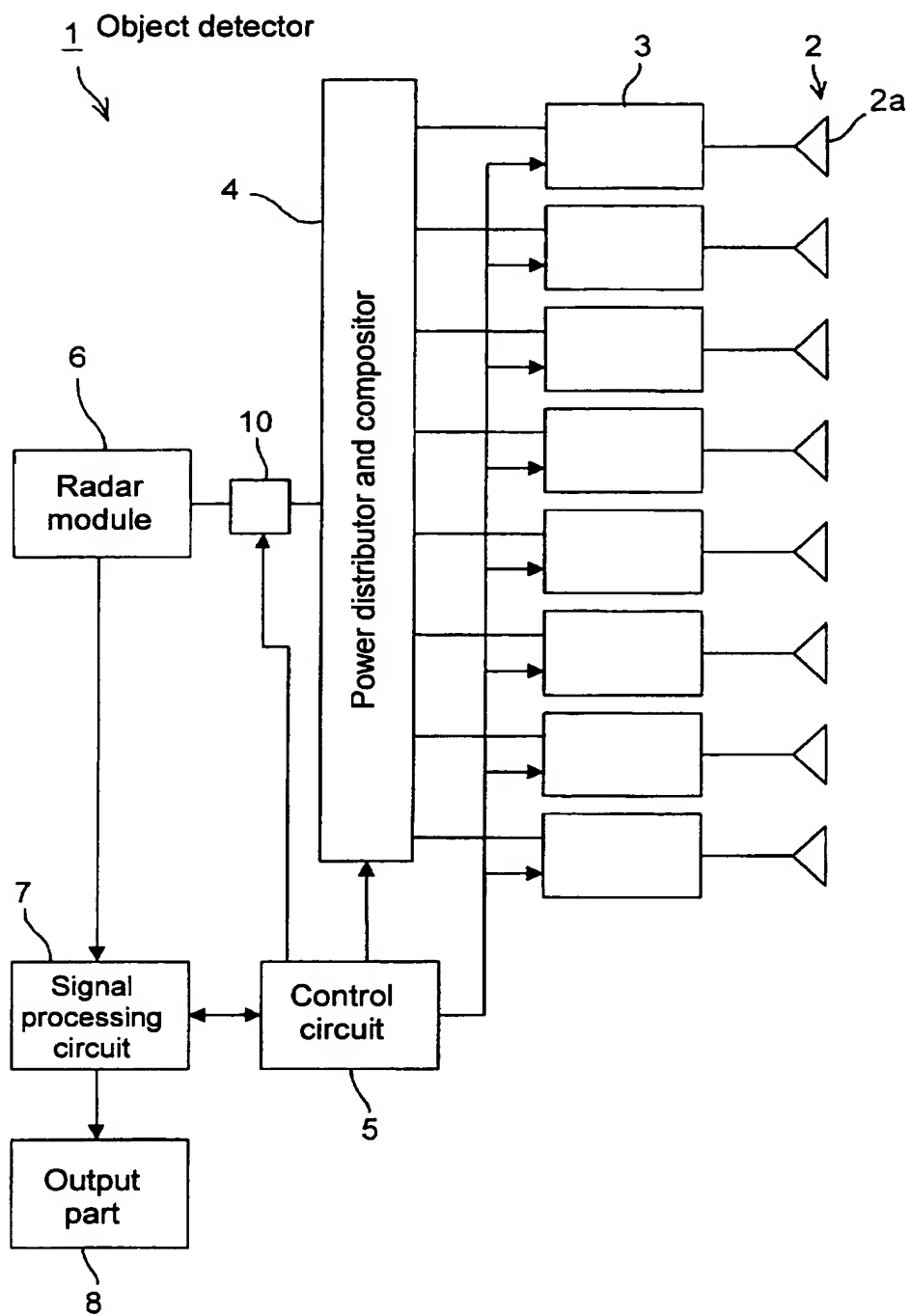
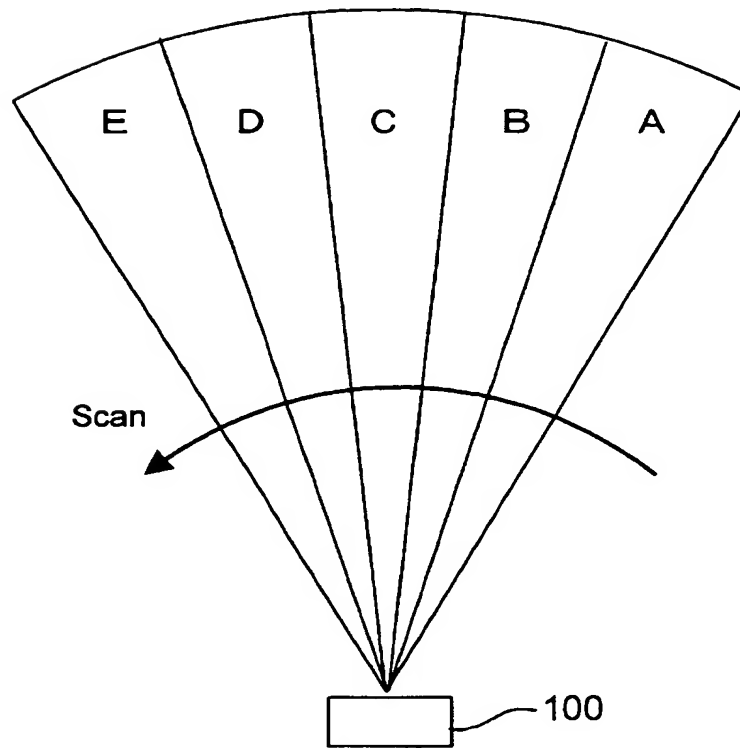


Fig. 10



PRIOR ART